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from TELUS Digital's Chief Data
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Founder of Telecom Review Group, and CEO of Trace Media International

Toni Eid
toni@telecomreviewgroup.com

Editor in Chief and Managing Partner for Americas

Jeff Seal
jeff@telecomreviewgroup.com

Senior Journalist

Elvi Correos
elvi@telecomreviewna.com

Editorial Team

Christine Ziadeh,
Clarissa Garcia, Corrine Teng, Elvi Correos,
Jeff Seal, Jessica Bayley, Jonathan Pradhan,
Marielena Geagea, Monika Jeleniak,
Pia-Maria El Kady, Novie Nuñez

Graphic Designer

Vanessa Haber

Lead Analyst Group - Production Manager - Copy Chief

info@telecomreviewamericas.com

Advertising

advertising@telecomreviewamericas.com

Special Events - Photo Director - Editor - Digital Properties

info@telecomreviewamericas.com

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Addresses**United States Of America**

3616 Far West Blvd, Suite117-301
Austin Texas 78731
Tel 512-312-9262
Fax 512-312-9265
www.telecomreviewamericas.com

Dubai

Trace Media FZ.LLC.
Dubai Media City, UAE
Bldg. 7, 3rd Flr., Office 341
P.O. Box 502498, Dubai, UAE
Tel. +971 4 4474890
www.tracemedia.info



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Welcome to 2025

hope that everyone had a great holiday and you are now returning to work. We are all getting ready for the industry event that always kicks off the new year, PTC. Once again, Telecom Review Americas is a media sponsor for this event and look forward to seeing you there.

We just returned from the Telecom Review Leaders Summit in December which was a resounding success. One of the highlights of the event was the presentation of the 2024 Telecom Review Excellence Awards featuring the "Best of the Best" in our industry.

This issue includes a special exclusive interview with Jenn Parkhill of Verizon Partner Solutions. We also have insightful interviews with many other leaders in our industry that you will find very informative.

Generative Artificial Intelligence is one of the most talked about new ideas, and its emergence presents trends in our industry. It marks an advancement in AI and machine learning, and its emergence presents an opportunity for forward thinking industry executives to expand their networks, innovate their business models, and adopt new technologies while controlling expenses to generate value for stakeholders.

Operators will consume AI through productivity applications and enterprise software, but the greatest potential value comes from combining private data with generative AI!

We look forward to seeing you in 2025 as Telecom Review Americas will be your industry source for Global Coverage/Regional Reach/ and Digital Influence.



Jeff Seal
Editor in Chief
and Managing Partner
for Telecom Review Americas



Telecom Review Leaders' Summit 2024 Solidifies Its Position as the Leading ICT Event for the Industry

Under the annual theme 'Global. Regional. Digital,' the 18th edition of the Telecom Review Leaders' Summit successfully wrapped up its two-day event, bringing together a diverse group of professionals, including telecom operators, vendors, industry regulators, government officials, content providers, cybersecurity experts, consultants, and other notable attendees.



The Telecom Review Leaders' Summit solidified its status as one of the most prominent and highly anticipated ICT events in the industry. Thousands of distinguished guests participated, representing various facets of the ICT sector. The event was supported by the Telecommunications and Digital Government Regulatory Authority (TDRA) and featured an esteemed roster of sponsors, including du, Netcracker, Huawei, PMP Strategy, Eurisko, Amazon Web Services (AWS), Cisco, Comarch, PCCW Global Console Connect, MYCOM OSI, NEC, Nokia, Salam, TELUS, Apptium, Fortinet, InfraX, Related, Sofrecom, Verizon, YUVO, AvanteBSS, Emircom, Pure Storage, Telcovas, Telecom Egypt, and ZTE.

From December 10–11, 2024, the Ritz-Carlton Dubai's expansive conference hall and exhibition area bustled with activity and served as a space for engaging sessions, meaningful networking, and brand promotion.

Telecom Review Leaders' Summit
Opening the floor of the 18th edition of the Telecom Review Leaders' Summit, Founder of Telecom Review, and CEO of Trace Media International, Toni Eid, addressed the audience with a welcome note, sharing Telecom Review's milestones and highlighting the industry's most notable achievements. "These milestones



demonstrate not only our growth but also our unwavering commitment to recognizing the leaders within the telecom and ICT industry, year after year," he remarked.

This year's summit raised the bar higher than ever, thanks to the participation of leading figures in the ICT industry from across the globe, representing regions such as the Middle East, Africa, North America, and the Asia Pacific.

During the first day of the summit, Sylvain Seignour, President of Netcracker Technology, and Issam Eid, CMO Africa, Levant, KSA, and Qatar, Telecom Review Group, discussed the evolving role of telecom operators in a digital-first world.

Seignour explained that Netcracker helps operators navigate data management and evolve into innovative tech providers by offering AI-driven digital solutions. "We assist telecom operators in maximizing their return on investment and capitalizing on new opportunities in a rapidly changing telecom landscape," he said. He emphasized that each operator's digital transformation requires a customized approach, as no two operators are alike.

Prominent ICT leaders within the North America region also participated on insightful panels about network cloudification, infrastructure strategies, cybersecurity, and the expanding role of hyperscalers.



Telecom Review Excellence Awards

A key highlight of the summit was the annual Telecom Review Excellence Awards ceremony, which honored the outstanding ICT brands and leaders for their achievements over the past year. The awards were followed by the annual gala dinner.

thanks to the thorough deliberation by our esteemed panel of global experts. Congratulations to all the winners, and we look forward to another celebration of excellence next year!"

Reflecting on the summit's success, Toni Eid, Founder of Telecom Review,

The Summit's Impact: Praises from ICT's Brightest Minds

Hear from the leaders who attended the 18th Telecom Review Leaders' Summit as they share their thoughts on the event's impact, insights, and success. These testimonials reflect the value of collaboration, innovation, and excellence that defined this year's gathering.

Monty Hamilton, Chief Product & Marketing Officer, TELUS Digital

I thoroughly enjoyed my time at the Telecom Review Leaders' Summit, connecting with other like-minded leaders, and sitting right on top of a wave of opportunity within the telecom sector that is serving as a great source of energy.

Dr. Bilel Jamousi, Deputy to the Director and Chief of Telecommunication Standardization Policy, ITU

We're incredibly grateful to Telecom Review for hosting the ITU CxO meeting for the sixth time at this remarkable summit. This year's discussions highlighted strong synergies among executives, fostering collaboration as we drive the digital future forward.

Anup Gupta, President of the SAARC Region, APTelexcom

It is very important for us to attend because we get to see a lot of what will come tomorrow. Many of the discussions are very eye-opening. It's



Jeff Seal, Chief of the Awards Committee, Managing Partner, and Editor-in-Chief of Telecom Review Americas, remarked, "In 2024, the Telecom Review Excellence Awards set a new benchmark, attracting significant industry interest with a record-breaking number of global nominations. To accommodate this, we introduced more distinct awards on a global and regional scale. These awards remain the industry standard for peer recognition,

and CEO of Trace Media International, expressed his gratitude, stating, "I would like to express my deepest gratitude to all the ICT leaders who have been brought together through this summit. Join us next year for a groundbreaking 19th edition."

This year, the awards were divided into global and regional categories. The full list of winners can be found [here](#).



important for us to meet industry peers, and this is one of the best events we've seen in recent days.

Shazia Sobani, Vice President Fibre Networks, TELUS

This is an important global platform which brings the talent and perspectives of leaders and experts from across the globe together to discuss what's happening today and the challenges faced by our industry.

Rick Kapani, Founder and CEO, Aptium

Telecom Review is revered throughout the industry as it fosters high-caliber conversations, dissects meaningful topics and brings the vendor community together; thus, we are able to collaborate through thoughts, ideas, and even disagreements.

Gagan Tandon, Chief Data and AI Officer, TELUS Digital

I want to express my thanks to the event organizers who brought together a cohort of executive leaders in telecom and artificial intelligence as they are the ones making the most impact in this industry.

Jennifer Parkhill, Senior Director Strategy Execution, Program Management, Verizon Partner Solutions

It's been great meeting with our customers and partners in the region. Telecom Review offers the opportunity to connect and learn about the progress companies are making in GenAI and 5G adoption and provides insight into the future global environment.

Gina Perini, CEO, Somos

Being here allows me to be around innovators and the people who are solving tough problems in the industry and bringing exciting innovation to all consumers across the world. This is the place you really want to be.

Andrew Douglas, Senior Director, Global Telco Lead, Pure Storage

It has been a great experience so far. We have really enjoyed it over the last couple of days. Apart from a wide variety of very rich content, it brings us up-to-date on where things are heading.

Maria Stebneva, Head of Sales, Canada, Juniper Networks

The Telecom Review Leaders' Summit is a fantastic event. Toni and his team are doing a fantastic job in bringing together special talents from the executive level who are sharing innovative ideas alongside basic ideas (such as how to build a common

infrastructure). What I like about the discussions is that they all make sense.

Tony Geheran, President, Strategic Broadband Consulting

This is my second year attending the Telecom Review Leaders' Summit; similar to last year, it's been a great experience. It's really interesting to see the experiences encountered in this region and the dynamics of it; it contrasts my experiences in Canada.

Issa Chini, COO, One37

Attending the 18th edition of the Telecom Review Leaders' Summit was invaluable to me as it provided a unique platform to connect with global leaders in the telecom and ICT sectors. The Summit was a vibrant hub of ideas, innovation, and networking opportunities, enabling me to stay ahead of the trends and challenges in today's fast-paced ICT ecosystem.

Andreas Hipp, Executive Chair, ConnectiviTree

I have to thank Toni, who invited me to join the summit. For me, to close the year and have some face-to-face meetings and a bit of personal time with some well-known partners and customers is very valuable. I also appreciate the content that is shared by a lot of the leaders here. **TR**

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An aerial night photograph of a city, showing a dense network of glowing lights and roads. The lights are primarily yellow and orange, creating a complex pattern of lines and clusters. The city is surrounded by dark areas, possibly water or undeveloped land. The overall scene is illuminated by the city's lights, creating a high-contrast, vibrant image.

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Jim Fagan, CEO, EXA Infrastructure

A Visit with EXA Infrastructure's CEO Jim Fagan

Jim Fagan is EXA Infrastructure' new CEO. On the cusp of the PTC event, which has a focus on network infrastructure, Telecom Review Americas felt it would be interesting to get Jim's perspective on many of today's changes in the network infrastructure environment. Below are some of the questions we posed for Jim and his thoughts on the market.

How is EXA Infrastructure responding to the rapid changes in network demands driven by AI?

Out-investing the market in critical digital infrastructure has been our focus over the last three years. We've invested over \$300M to expand and enhance more than 155,000 km of fiber optic connections. Our network investment approach is carefully considered. We are not a 'build and they will come' player – meaning we listen and respond to our customers, we stay close to what is happening with technology and across the market, and we make sure each investment decision is connected to our overall strategy. In fact, core to our strategy is the flexibility that allows us to scale and adapt to the evolving needs of AI. Scale is everything when it comes to digital infrastructure, and more so when we think about enabling AI. Thanks to the depth and breadth of our network and the cutting-edge technology we deploy, EXA Infrastructure is uniquely positioned with a future-proofed network in regions where AI-driven demand is accelerating. Beyond our first-mover advantage in key geographies, we've anticipated the need to manage massive volumes of data traveling to and from data centers across the Atlantic. Addressing this demand requires scalable networks equipped with the latest fiber technology and significant investments in new infrastructure. That's exactly what we're delivering.

Is AI truly shaping a "Transatlantic story" in your experience?

Absolutely. The transatlantic

route remains one of the busiest for content providers, now driven even more by AI-related needs. A significant amount of data is moving from the U.S. to Europe and beyond, where it's distributed across hyperscale data centers and emerging cloud regions. While AI training in distant data centers has its advantages, it also demands reliable and secure data transport over longer distances.

Subsea connectivity is the clear answer, but it must meet high standards. Transmitting mission-critical data across vast distances requires robust networks with numerous routes and landing points to handle growing traffic volumes. While AI applications are not overly latency-sensitive, they demand constant availability. Redundancy and high bandwidth are critical, underscoring the need for trusted partners offering diverse routing options.

How does EXA Infrastructure ensure this "always-on" connectivity in practice?

For our customers, "always-on" means having at least three or four diverse routes to ensure business continuity. There is heightened awareness of resiliency as customers look to mitigate risks like cable cuts, outages, or bottlenecks. One of the design principles of our network strategy is diversity, and where we can, we look to have multiple routes to serve the diversity or triversity requirements of customers. Our geographic focus means we become experts in doing this, and we leverage some of our unique capabilities including the 20 cable landing stations across our network footprint.



For our customers, "always-on" means having at least three or four diverse routes to ensure business continuity



Does AI necessitate a rethink of both data center construction and infrastructure planning?

Absolutely. AI-driven traffic is reshaping the entire ecosystem. It demands more power, better



Subsea connectivity is the clear answer, but it must meet high standards

connectivity, and increased data center capacity. Submarine cables now need to land in unconventional locations—away from populated areas and closer to reliable power sources.

We're seeing the internet topology shift as AI-related data traffic increasingly moves to regions with abundant power, such as the Nordics, Portugal, and Southern Europe. In response, we've expanded our infrastructure to

connect large data center campuses in these areas, ensuring reliable, high-capacity networks.

Our strategic investments and expansion to the edge of Europe focus on distributing large workloads efficiently. This robust, secure backbone supports organizations leveraging AI to innovate, differentiate, and grow.



Are there other AI-related challenges EXA Infrastructure is addressing?

One significant challenge is the need for shorter service delivery times. To address this, we launched our Managed Fiber Network (MFN) service, enabling organizations to scale quickly with secure, geographically resilient networks.



MFN combines the benefits of dark fiber and equipment ownership with operational simplicity. Offered as a full turnkey solution, it lets customers deploy into new markets cost-effectively and without delays. Our service also leverages state-of-the-art Network Operations Center (NOC) capabilities, robust operations management, and dedicated engineering resources to ensure optimal performance, proactive monitoring, and rapid issue resolution.

MFN provides the scalability and simplicity needed for organizations to innovate without being constrained by infrastructure limitations.

What's ahead for EXA Infrastructure in 2025?

We continue to execute our strategy to be the 'go-to' digital infrastructure partner for customers across Europe, the bridge between Europe and North America, and the gateway connecting Europe to Asia. What makes EXA unique is our focus. First, we are laser focused on the geographies we serve, which means we are experts in these markets. Second, we are focused on a narrow portfolio of products which means we can be brilliant at what we do. And lastly, we are focused on serving a set of customers that require critical infrastructure, meaning we don't have to be everything to everyone. We are in active discussions on new partnerships and potential M&A, and I hope to share more about these in the coming months. **TR**



To address this, we launched our Managed Fiber Network (MFN) service, enabling organizations to scale quickly with secure, geographically resilient networks



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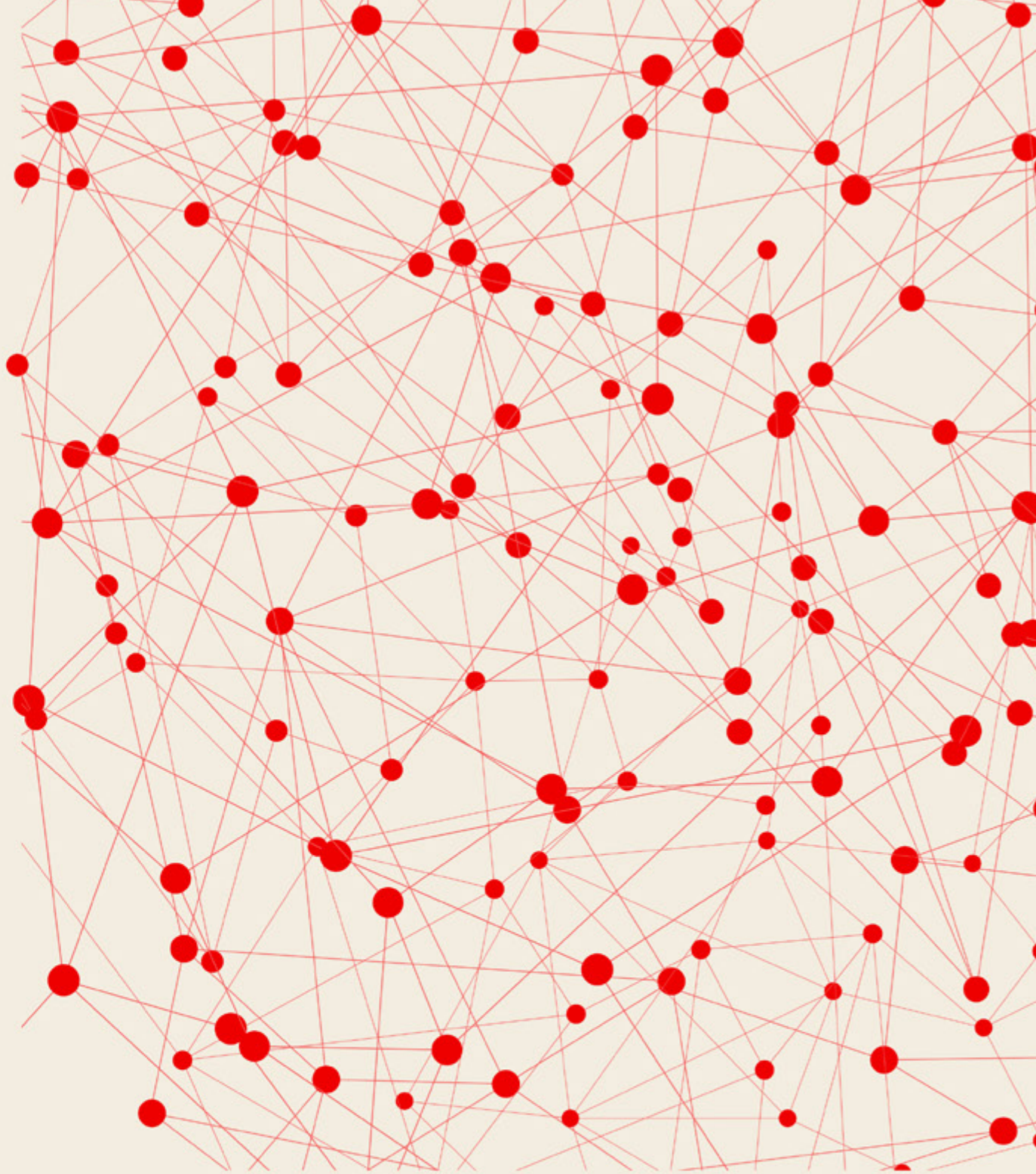
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Jennifer Parkhill, Senior Director Strategy Execution, Program Management, Verizon Partner Solutions (VPS)

Verizon's Jennifer Parkhill on the Year 2025

Verizon Partner Solutions specializes in supporting wholesale carriers, resellers and third-party agents of all sizes take on their customers' challenges. Telecom Review Americas asked Jennifer Parkhill of Verizon Partner Solutions to give us some insights into their new initiatives. These insights are listed below.

With the growing importance of network security, and VPS playing a key role in this domain, how is your company scaling its VPS services to meet client needs?

Network Security will always be at the core of the networks we build and deliver for our customers. The threat landscape and threat vectors continue to increase each year. For Verizon, our focus continues to be on end-to-end network solutions that protect our customers, their networks and infrastructure from the threats faced.

VPS is constantly working to integrate security with all network services. We want to provide services to segment traffic and mitigate risk while providing network and hardware agnostic options. DDoS, SHyN & VBIS.

How is Verizon driving your fiber network to bring AI solutions to your clients?

Whether supporting the connectivity of training or inference models, we see the need for increased bandwidth as being an essential component to deliver AI solutions to clients. The key for us is to continue to not only ensure our fiber networks connect to the data centers, edge computing locations and end user locations, but are configured to support the increased bandwidth demands at these different locations. We are working diligently to meet these demands and prepare for where the bandwidth will be needed in the future.

Verizon leverages its advanced fiber network by focusing on several key aspects such as:

- Offering high speeds and low latency, which are essential for AI applications requiring real-time data processing, such as predictive analytics, machine learning, and IoT-driven

automation. The reliability of the network enables seamless AI-powered solutions in industries like healthcare, retail and manufacturing.

- With our fiber network, we support edge computing bringing AI processing closer to the source of data. This reduces lag and enhances the efficiency of AI applications in areas like autonomous vehicles, smart cities and remote monitoring.
- The fiber backbone is critical for enabling Verizon's 5G network, which supports AI-driven IoT devices.
- Verizon uses AI internally to optimize its fiber network performance, ensuring minimal downtime and efficient data routing.



Network Security will always be at the core of the networks we build and deliver for our customers



Verizon recently partnered to bring their network to power security camera monitoring for business. Can you tell us more?

The proliferation of not only security cameras, but sensors, calibration instruments and a multitude of other IOT use cases have been supported by Verizon for over a decade. Providing connectivity to IOT devices and applications continues to be a focus of Verizon with many of our partners and end users. Tactacam, a leader in innovative outdoor surveillance technology, introduced a new cellular-connected camera that provides security and monitoring without the need for Wi-Fi. The Defend camera leverages Verizon's reliable network for enhanced connectivity.

Tactacam reinforces how Verizon's network enables innovation. Tactacam's cellular camera helps address the unique needs of property and equipment owners, construction sites, camping areas – wherever a person needs that visibility when they are away for peace of mind.

For example, a business who has 10 construction sites around Colorado, as an example, he, or she could, set up the cameras, and then they're connected back through the Verizon network, so then they could see at any time what's going on.

Tell us what you're doing on upskilling.

This is an area I'm speaking about on the panel. With the Verizon Partner Solutions team, we have the ongoing opportunity to train and upskill/reskill our employee base. Within VPS, we champion skills that benefit skill development, and also incorporate feedback we receive from customers. Based on that, we're finding that we actually have a positive correlation between employee engagement and net promoter score (NPS). For example, we train the team on a topic, they share that knowledge with customers and are highly engaged, and that results in higher satisfaction scores. Customers are telling us that they like the positive interactions



The proliferation of not only security cameras, but sensors, calibration instruments and a multitude of other IOT use cases have been supported by Verizon for over a decade



they're having with our team members. It's a win-win. If we get this upskilling journey right, you also improve your customer experience, which ultimately is, course, what we want to do.

You are doing work with connected cars. Can you please tell us more?

Verizon has a long history in the connected cars space from our support of Auto OEMs to our Verizon Connect offerings. We continue to stay closely aligned in partnerships with innovators and disruptors in this space to ensure Verizon's connectivity solutions are embedded in their solutions and end users have an opportunity to be on the award-winning Verizon network. From a global perspective since we're at Telecom Review's event in Dubai, VPS has worked for several years now on the interoperability of IOT and Connected Car platforms necessary for International OEMs that are looking for seamless, secure and automated solutions across multiple geographies so the connectivity that receive in one

country is the same as in other regions of the world.

Verizon provides various solutions for connected cars, leveraging our network infrastructure and expertise in telematics. We offer services like:

- Vehicle diagnostics and maintenance: Verizon Connect provides fleet management solutions that include vehicle diagnostics, maintenance scheduling, and remote monitoring.
- Safety and driver assistance: Verizon's telematics solutions can enable features like automatic crash notification, emergency calling, and roadside assistance.
- In-vehicle connectivity and entertainment: Verizon offers embedded and brought-in connectivity solutions for vehicles, enabling Wi-Fi hotspots, streaming services, and other infotainment options.



Can you please tell us what will be new for Verizon Partner Solutions for 2025?

There are three main focus areas that VPS will focus on in 2025:

1. High bandwidth connectivity; with the increase in traffic due to GenAI use cases, this is something we're very focused on to expand high bandwidth options, specifically around the United States and to locations our customers need us to be.
2. Second focus area is digital transformation. We are continuing to invest to develop the capabilities that VPS customers require in tools and systems; for example, we're layering on automation that shares real time milestones with customers in the Exchange portal.
3. Third area is upskilling and reskilling the VPS team. As I mentioned earlier, we will continue to cultivate and provide opportunities for the team to be ahead of industry trends and capabilities to meet customers' needs. Powering and empowering how people live, work and play continues to

be a foundation for growth in the industry. Being focused on the customer and a world class workforce will be essential to go beyond in 2025.



From a planning perspective, upskilling and gender equity is part of your big three?

Absolutely, back to my comment earlier about why. Customer experience and employee engagement have a direct correlation and a positive dynamic together. We want to make sure that with all the latest technology trends that continue to evolve, everyone has the opportunity to learn and grow and know what it means for their role.

A lot of times mesh networks and rerouting of networks is a big deal. I know you guys had concentrated on that a lot. I don't know how far along you are or not. That is essentially an AI type function that a lot of people don't really follow.

Yes absolutely. You'll hear our network team share that we've been doing this for 20 years because of an example just like that, where traffic was automatically rerouted; in cases where there's a natural disaster or something happens, it's important to make sure the ultimate traffic is getting where it needs to go. **TR**

We want to make sure that with all the latest technology trends that continue to evolve, everyone has the opportunity to learn and grow and know what it means for their role





The Evolution of the Central Pacific Cable

Today, a great engineering endeavour, historically significant in the overall context of submarine cable development is unfolding in the Pacific Ocean. Pacific Connect, a Google supported network of Pacific Ocean cables, encompassing roughly tens of thousands of kilometers of fiber in various systems and interlinks, all announced to the world within the last 15 months, will deliver connectivity not just across the vast ocean, but to the small populations of several widely separated island nations who live there.

While a significant body of work on any number of levels, nowhere is the importance of this development more keenly felt than among the almost 12,000 population of Tuvalu, one of the world's smallest sovereign

nations—by population, if not by area—and the last Pacific Island nation yet to be connected to the global information superhighway by an optical fiber cable.

This work began as a feasibility study for a Central Pacific Cable which has now evolved into the Pacific Connect initiative, a collaboration between APTelecom, Google and others.

Let's take a closer look.

Environment

The Pacific Island region has a population of approximately 2.3 million people occupying some 15% of the earth's surface. Distances are vast and populations are small. The environment is harsh. The highly diverse community includes Tuvalu, with its tiny population already mentioned, similarly sized



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Nauru, and Kiribati, whose population of about 120,000 people, lives on of 33 coral atolls spread over 3.5 million square kilometres: an area larger than India.

Cable Concepts

The general idea of Central Pacific Cable (CPC) first came to light in September 2022. At a regional development meeting in Suva, Fiji, the United States' government had suggested it was prepared to support deserving projects aimed at developing the economies of the island nations. This dovetails well with the U.S.'s strategic objective of promoting an open, interoperable, secure and reliable, global ICT ecosystem.

Inafa'maolek

Government, industry and community representatives from interested economies across the Pacific Island region got together, along with long-term industry advisors from APTelecom, to consider what a new submarine optical fiber network widely serving the community might look like. These are small economies, where infrastructure funding is frequently externally supported, for example by grant aid or soft financing. Accordingly, means were devised to deliver a modest network, carefully managing limited resources, and delivering the greatest possible benefit at the lowest possible cost. This is a familiar approach locally.

The initial concept was of a backbone trunk, connecting the American territories of Guam and American Samoa, with connecting spurs to up to nine other countries and territories. The rationale for choosing Guam and American Samoa as the terminals for CPC was both technical and financial, aiming to optimise costs and benefits. The proposed system would close a loop with Hawaii, to which both Guam and American Samoa were already connected (Figure 1), creating a ring topology, delivering excellent resilience and, importantly, enabling straightforward onward connections beyond the local community to the regionally important markets of U.S., Japan, Australia and New Zealand.

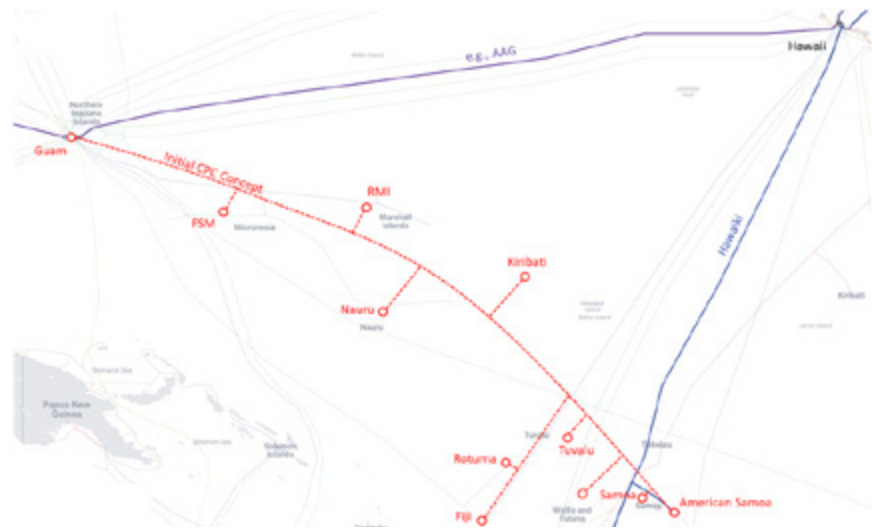


Figure 1: Central Pacific Cable initial concept (in red). The trunk as shown had an estimated length of 5,700km⁴

The local communities would support the common elements collectively. System resilience was to be provided externally, by separate systems, already built and operating.

Proudly leading the communal charge, in high hopes of securing its first submarine cable connection, the Tuvalu Telecommunications Corporation (TTC) applied for a grant from the U.S. Trade Development Agency (USTDA) to conduct a feasibility study into the prospective system. The feasibility study is a body of work that evaluates a project based on its technical, financial, market and environmental aspects, and seeks to determine, with a high degree of confidence, whether a concept is likely to be successfully delivered and perform throughout its design life. The application was successful, the grant awarded in September 2023, and work commenced, with Florida-based, APTelecom LLC selected to perform the feasibility study. The results of the study were clear and positive and the system was on track to be funded and built.

"Building Belonging [and] Expanding Opportunity"

Although yet to see the light of day, the work undertaken by the local

community in response to the U.S. government's encouragement was not the only activity then being undertaken. Almost simultaneously with the USTDA's award of grant funding for Tuvalu's feasibility study, Google announced plans for the Pacific Connect initiative.

Google's plans included redundant transpacific cables called "Tabua" and "Honomoana," connecting Australia and the U.S., cross-connected in Fiji and French Polynesia, delivering double-ring or figure-of-eight protection. This concept offered the highest possible reliability, including double landings in the key nodes at Fiji and French Polynesia that would be unaffordable to local governments or businesses. In January 2024, Google announced a new trans-Pacific subsea cable route called "Humboldt," linking Chile, French Polynesia, and Australia along with two intra-Pacific cables, "Bulikula," connecting Guam with Fiji and "Halaihahi" linking Guam and French Polynesia.

Given the extent to which the two sets of plans would overlap, and encouraged by its sponsor, detailed discussions were immediately entered into between TTC and its partners on one hand and Google on the other, with



Figure 2: Google announced Pacific Connect initiative cables, with the original CPC route superimposed in red

a view to optimising the overlapping objectives of the two approaches.

The Pacific Network Rolling Out Today

A phenomenal amount of cable currently being installed in the Pacific Ocean—far more than might ever have been predicted.

Pacific Connect delivers the first fiber connection to Tuvalu via the Tuvalu Vaka cable. If it were to do no more, the project would be worthy of the effort. Far beyond this, however, in delivering a second landing to several other countries, the entire system delivers the other benefits of badly needed redundancy. More even than this, the Pacific Connect network delivers greatly enhanced resilient connections to the major markets of the Pacific Rim, including, for the first time, through Humboldt, to Chile and South America.

So, what are the benefits that accrue to all this cable building in this historically underserved part of the world? For Pacific Island nations participating, the benefits are numerous, a few examples follow.

New Business Opportunities and Job Creation: More reliable internet

connectivity enables local businesses to expand their reach globally, fostering e-commerce and trade. New business start-ups will be encouraged creating new jobs across the region. This will encourage more young people to remain at home.

E-Learning Access and Teacher Training: Students in remote areas gain access to global educational resources and online learning platforms. Educators can participate in professional development remotely, improving the quality of education delivered locally.

Telemedicine Services and Health Information Sharing: Affordable high-speed internet enables remote medical consultations, diagnostics, and treatment, improving healthcare access in isolated regions. Medical institutions can securely share health data and collaborate more effectively, enhancing public health management.

Communication Resilience: The new submarine cables will provide significantly more reliable communication infrastructure, crucial during natural disasters like cyclones, earthquakes or tsunamis.

Gender and Social Equity: By democratizing internet access, more

opportunities arise for historically marginalized groups, promoting equity.

Strengthened Regional Cooperation: Enhanced connectivity fosters trade and collaboration among Pacific Island nations and between the Pacific and other regions. Governments can work together more efficiently on shared challenges such as climate change and sustainable development.

Catalyst for Digital Transformation: Fostering socioeconomic growth and resilience across the region. **TR**



The Pacific Island region has a population of approximately 2.3 million people occupying some 15% of the earth's surface





Harnessing AI for Impact: Insights from TELUS Digital's Chief Data and AI Officer

Artificial intelligence (AI) has become a driving force in reshaping industries, and the ICT sector is no exception. At TELUS Digital, AI is at the heart of innovative solutions, enhancing customer experiences, streamlining operations, and upholding the highest standards of data privacy.

During the 18th edition of the Telecom Review Leaders' Summit, Gagan Tandon, Chief Data and AI Officer at TELUS Digital, expanded on the foundational strategies that are enabling successful AI implementation, the AI-driven initiatives transforming operations at TELUS Digital, and the vital role of data privacy in maintaining trust.

With artificial intelligence dominating the ICT landscape, what AI-driven initiatives is TELUS Digital currently pursuing?

I want to set the stage a bit here; what we have found is that most of the companies who achieve the greatest success with AI initiatives have taken some steps before they actually started to work on AI use cases.

Firstly, they made sure that they have an established operating model where they can funnel AI use cases and understand what value AI provides, what the ROI is, and what the total cost of ownership (TCO) of actually taking on an AI use case is.

The second dimension addresses the foundational architecture, which comes as a result of bringing on more AI initiatives and more AI case studies. The key question that should be asked is 'What is the architecture that will make it the most impactful?'

And the third dimension addresses the governance structure whether it is data governance or AI governance. This needs to be established to ensure there is no bias, and data privacy compliance is met.

Lastly, we need to question which reusable frameworks and accelerators to deploy. Many companies want to get started with AI use cases right away, and sometimes it works a lot better if you already have a framework or accelerator you can use to deploy the use case quickly.

The AI initiatives that TELUS and TELUS Digital have embarked on

encompass workforce management, where we can predict the number of hours the workforce will require in the next few months or so, and customer interactions, where we ensure the customer interactions are much simpler and optimized during interactions with agents or chatbots.

Another initiative is case management, where we've integrated AI and automation to enable RPA bots to send data on AI model use cases. These use cases are then categorized to inform their design.

We have also worked on some 'next-best-action' case studies, exploring the right recommendations for the agent to relay to the customer during interaction, reducing the agent analysis time as well as customer churn, and definitely increasing the customer satisfaction of the entire process.

How does TELUS Digital balance AI's rapid growth with data privacy?

Data privacy is very central to our initiatives. We believe that we have a responsibility to our employees, our customers, our shareholders, and our partners, and we also know that this trust will not be given or granted; it will have to be earned. Thus, we have established an AI governance board within TELUS Digital and joined hands with TELUS, where we vet all the data in our AI initiatives.

One standout example of our commitment is the TELUS.com GenAI support tool, powered by Fuel iX, our enterprise-grade AI engine developed by TELUS Digital. This tool is the first in the world to achieve international Privacy by Design certification (ISO 31700-1), which is a testament to our leadership in embedding privacy into AI innovation.

Through our efforts, we aim to understand where data is collected from, where the data is stored, what data is stored, what the security guardrails regarding the stored data are, what data is shared, what cannot be shared, and which framework ensures the data never leaves the bounds of its respective domain. This

also means that, if a customer says, 'Delete my data; I don't want my data to be retained by you,' we will make sure that we have enough processes in place to address the request.

We are not just setting up an AI governance board or data governance board for data privacy, we have also set up frameworks where an accelerator (that is pre-trained on PII and PHI) can scan texts and images and mask the data before it is actually used for AI training. This framework has been deployed to healthcare clients, telecom clients, and financial services.

In your opinion, how will AI transform global business operations in the next five years?

The key business functions, as anybody within the telecom industry would know, are network management, network capacity management, CRM, business process management, workforce planning, and HR and finance. Of these business functions, many companies are already embarking on journeys to solve the problem using AI.

For example, in network capacity management, AI can detect network traffic or network traffic congestion and divert the traffic to the right nodes, depending on where the problem may have occurred. In terms of network design, AI can select the right network configuration to achieve optimum output through a telecom network itself.

On the CRM side, AI is being used to understand the next best action, as I previously mentioned, and suggest the right recommendations to give to the customer. Generating leads through AI can also help in sales and marketing, where it helps to understand the consumer's behavior. You can gather data from sensors and compile the different interactions the customer has had by demographic. This knowledge can then be used to target those customers.

Overall, I believe that AI is going to transform almost every business function, both in small and big ways, and it will be here to stay. **TR**



Marco Lichtfous, Managing Director of PMP Strategy Luxembourg

From Enablers to Solution Providers: The Telecom Industry's Next Frontier

The telecom industry has long been at the heart of technological innovation, driving progress with advancements such as 4G, 5G, and the Internet of Things (IoT). Yet, as the world continues to evolve at a rapid pace—shaped by digital transformation, sustainability goals, and the demands of a platform economy—the industry finds itself at a crossroads. For Marco Lichtfous, Managing Director of PMP Strategy Luxembourg, the answer is clear: it's time for telcos to go beyond networks and embrace a new role as solution providers.



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Traditionally, telecom companies have defined themselves as enablers, delivering infrastructure, data, and connectivity.

This position, while critical, is no longer enough. Lichtfous believes telcos must shift their mindset to actively deliver solutions tailored to the unique needs of industries, from healthcare and manufacturing to energy and agriculture. "We have unique capabilities," he explains. "It's not just about building networks or enhancing internal operations anymore. Telecom companies have the expertise and tools to bring comprehensive solutions directly to industries, and it's time to seize that opportunity."

Fintech: A Proof of Concept

The fintech sector offers a clear example of how telcos can successfully expand beyond traditional roles. By entering the financial services market, some telecom companies have transformed into active solution providers, delivering mobile payments, digital wallets, and financial solutions to retail customers. This evolution didn't stop at providing connectivity; it addressed a specific market need and created a new revenue stream.

This success in fintech demonstrates what's possible when telecom companies take bold steps to deliver value beyond networks. If telcos can become solution providers in financial services, why not replicate this approach across other industries?

A World of Untapped Potential

Across sectors, the potential for telecom-driven innovation is immense. Take healthcare, for instance, where technologies enabled by telcos, such as remote surgery and connected care, are already revolutionizing patient outcomes. Or smart manufacturing, where predictive maintenance and enhanced connectivity are reshaping

production processes. Energy management, agriculture, smart cities, and connected vehicles are further examples of industries where telecom solutions could drive real value.

Despite these possibilities, Lichtfous argues, telcos have been too focused on optimizing their existing operations rather than positioning themselves as strategic partners for industries. "We're still playing defense," he points out. "We see ourselves as infrastructure providers, not as innovators driving new solutions and revenue models. Isn't it time to play offense again?"

Building Ecosystems That Drive Value

For Lichtfous, the way forward lies in building ecosystems that integrate telecom capabilities with industry needs. Rather than simply offering the technological backbone, telcos should actively engage with businesses, understand their challenges, and deliver end-to-end solutions that create measurable value.

Imagine a car manufacturer, for example, working with a telecom provider to design smarter production lines, implement advanced maintenance systems, and enhance connected vehicle technology. Or a city partnering with a telecom company to build an integrated smart grid that optimizes energy usage and supports sustainability goals. These are not just theoretical opportunities—they are areas where telcos can lead, provided they embrace a solutions-oriented mindset.

"Telcos have the technology, the expertise, and the infrastructure," Lichtfous says. "What's missing is the willingness to step forward as solution providers, not just enablers."

Time for Bold Action

The path ahead requires a cultural and strategic shift within the telecom industry. Lichtfous challenges telecom leaders to adopt

a more aggressive approach, one that positions them as advisors, innovators, and drivers of change across industries.

The question is no longer whether telcos have the tools to deliver these solutions. It's whether they are ready to claim their role as architects of the future. The time for bold action, as Lichtfous emphasizes, is now.

In a world where industries are increasingly interconnected, telcos have a unique opportunity to drive synergy, innovation, and growth.

By moving beyond networks and building transformative ecosystems, the telecom industry can unlock new revenue streams and reaffirm its place at the forefront of global progress.

The telecom industry has the chance to redefine its role and shape the future. The question remains: Who will lead the charge? **TR**



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architects of the future





Ari Banerjee, Senior Vice President, Strategy, Netcracker Technology

Connectivity in Space: LEO Satellites Help Bridge the Digital Divide

The communications industry is working towards ubiquitous connectivity, and recent advances in satellite technology are making it easier to bridge the gap.

atellite technology has played a vital role in global communications for decades. Starting with TV broadcasts and basic phone calls and evolving to broadband internet and mobile backhaul, geostationary Earth orbit (GEO) satellites and medium Earth orbit satellites (MEO) have been filling the connectivity gaps in hard-to-reach areas not connected by traditional telecom networks. However, due to the distance these satellites cover from Earth, latency has become an issue, preventing their widespread use in real-time communications.

Low Earth orbit (LEO) satellites are much closer to Earth—ranging from 300m to 1,500km—resulting in much lower latency than GEO satellites. LEO satellites can also be linked together to increase capacity. The downside of LEO technology has been the cost, limiting their use in commercial networks. With recent technological advances like software-defined control and AI, as well as lower cost launches, LEO satellites offer an exciting and affordable option to bridging the digital divide, filling mobile coverage gaps and equipping diverse industries with high-quality and mission-critical communications anywhere in the world. This is specifically pertinent when considering the increasing impacts of natural disasters, such as flooding caused by hurricanes, which

can leave people isolated and unable to communicate. Using satellite communication to reach these areas could allow for aid to reach them more quickly.

However, the demands of highly dynamic LEO satellite networks place requirements on network and service operations that go above and beyond what any modern telco or satellite provider has been equipped to handle. In addition, given the on-demand nature of LEO satellite connections due to their low latency and finite capacity, operators need an efficient and scalable way to transact with customers and partners. Key issues include:

- **Highly Dynamic Operations:** Building a real-time view of the service topology is extremely complicated given the many moving parts in a satellite network.
- **Multi-Domain Services:** New operational systems are needed to model, manage and orchestrate services across space and Earth.
- **Complex Diverse Global Customer Base:** Different business models and better engagement models will be needed to address the specific needs of customers in different countries and adhere to the specific requirements of those countries including language, currency, taxation schemes and data privacy.

Another emerging technological innovation telcos need to consider is the ability to connect satellites directly to regular mobile, as well as IoT, devices using direct-to-device (D2D) technology. In place of dedicated satellite phones, ordinary smartphones can seamlessly switch from 4G/5G mobile networks to satellite to maintain connectivity and fill coverage gaps. In the IoT market, this presents opportunities to keep remote sensors and tracking devices connected at all times for

use in agriculture, transportation and environmental monitoring, among others, enabling operators to offer ubiquitous connectivity to consumers and a variety of industries.

Telcos and Satellite Operators Embrace the New Era of Communications

In order to take advantage of the communication potential introduced by LEO satellites, both telcos and satellite operators need to adapt to these new requirements. By ensuring their systems are able to handle the interconnection between satellites and telco networks, both parties can play a significant role in closing the connectivity gap.

Telcos can extend their coverage by placing 5G RAN in areas that are difficult to serve and using satellite for backhaul, employing a multi-orbit strategy. Fixed satellite access can address the consumer and business market in areas that are not economical for 5G, D2D or fiber.

To serve these telco markets, satellite communication providers need a new way to manage, optimize and monetize their business as they prepare to offer new types of services, expand into new markets and differentiate themselves in what is becoming a highly competitive market. Satellite operators require:

- The ability to deliver and guarantee the highest service quality at any time, helping them address mission-critical services in highly demanding verticals and the governmental market.
- Ways to engage with their customers and partners in a more digital and API-centric way, making it easier for customers to purchase or modify services and get the support they need.
- A method to easily create any type of service offer and support any customer type in any country in the world. Satellite operators need to be able to quickly adapt to changes in the market and take advantage of new innovations.

To meet these requirements, Netcracker has developed the industry's first blueprint for multi-orbit satellite IT, incorporating new innovations to help satellite providers always guarantee the highest service quality.

The Netcracker Digital Satellite Solution encompasses significant innovations in real-time operations and sophisticated BSS applications and is deeply embedded with AI to help satellite operators extract the maximum value from their significant investments. With our solution, operators can deliver and guarantee the best service quality at any time, provide premium digital engagement for their customers, and expand their business with any type of customer and service offering, in any country.

Utilizing its Digital Satellite Solution, Netcracker is helping satellite operators to expand their communication offerings through deeper integration with telco domains, maximizing their value in this growing market and delivering differentiating communication experiences. 



Low Earth orbit (LEO) satellites
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5G Monetization Trends Shaping Telecom

By the end of 2024, North America will continue to dominate the global 5G landscape, with 5G accounting for 75% of all mobile connections in the region. This rapid adoption underscores 5G's critical role in driving GDP growth and enabling transformative applications.

Mobile operators worldwide are projected to spend USD 180 billion in capital expenditures (capex) in 2025, focusing on expanding 5G networks, improving energy efficiency, and phasing out legacy 2G and 3G technologies. In the U.S. and Canada, operators are concentrating heavily on standalone 5G architecture, which unlocks new monetization opportunities by enabling more sophisticated use cases for industries and consumers alike.

The shift toward diversified services and consumption patterns is prompting operators worldwide to leverage 5G's multi-dimensional capabilities. Many are introducing tailored service packages to meet the unique demands of various customer segments, while also exploring new 5G monetization models to enhance user experiences.

This trend of differentiated connectivity is set to redefine how service providers cater to evolving consumer needs, with targeted investments in enhanced network performance, coverage, and availability.

Enterprise Gains with Custom 5G Offerings

In North America, private 5G networks tailored to enterprise needs are emerging as a key monetization trend for operators. These networks provide businesses with high bandwidth, low latency, and customizable features, creating lucrative opportunities in industrial IoT, smart manufacturing, and logistics. By addressing sector-specific demands, telecom operators

can tap into growing enterprise revenues.

Key technologies driving these advancements include network slicing, multi-access edge computing (MEC), and fixed wireless access (FWA). For instance, T-Mobile uses slicing for enhanced video communication, while partnerships with hyperscalers like AWS, Google Cloud, and Microsoft Azure enable MEC capabilities for IoT applications. However, operators face challenges as hyperscalers and OEMs capture a significant share of this revenue, often directly partnering with enterprises for private networks.

Notably, operators like TELUS and Cisco are making strides in connected car solutions by leveraging TELUS' 5G SA network and Cisco's IoT Control Center to offer telematics, infotainment, and subscription-based Wi-Fi services. This partnership showcases how private 5G networks can support innovative business models, benefiting automotive OEMs and end users alike.

Network slicing is another vital component, enabling operators to deliver tailored services across industries such as healthcare, IoT, and automotive. This approach provides dynamic service options and new pricing models, supported by advancements in core and radio network architecture. TELUS, for example, uses Ericsson's dual-mode 5G Core to co-host 4G and 5G networks, facilitating applications in cloud gaming, augmented reality, and public safety.

As the ecosystem matures, telecom operators must refine their strategies to capture a larger share of enterprise revenues, balancing

partnerships with hyperscalers while maximizing their unique network capabilities.

The Rise of 5G FWA

Fixed Wireless Access (FWA) is emerging as a transformative solution in the U.S. broadband market, providing operators with a significant 5G monetization opportunity. Unlike traditional fiber deployments, FWA offers a faster, more cost-effective means to deliver high-speed internet, particularly in underserved suburban and rural areas.

Operators like T-Mobile and Verizon have led the charge, with their FWA services driving broadband subscriber growth and outpacing traditional cable providers. Government initiatives, including funding programs and financial assistance through initiatives like the Affordable Connectivity Program, have further boosted FWA adoption by offering discounted pricing to underserved households.

Consumer interest in 5G FWA is growing due to its affordability, faster speeds, and broader coverage compared to legacy broadband services. Enterprises, too, are embracing FWA for its flexibility, scalable connectivity, and suitability for remote operations. Vendors like Nokia are tailoring their strategies to attract these segments by bundling services, introducing competitive pricing, and investing in innovative Customer Premises Equipment (CPE).

The U.S. has become a global leader in 5G FWA deployment, showcasing how mobile operators can disrupt fixed broadband markets with minimal incremental investment. Since 2021, U.S. operators have



added millions of FWA subscribers while maintaining strong mobile network performance through efficient spectrum use and traffic management.

5G Advanced and Standalone Networks

As 5G technology continues to evolve, operators are focusing more on monetizing next-gen services such as 5G Advanced, which promises faster speeds, lower latency, and enhanced user experiences.

Through 2030, 5G Standalone (5G SA) and 5G Advanced will be key priorities for CSPs focusing on more value-driven services instead of relying on data volume. According to the Ericsson Mobility Report (November 2024), 5G Advanced is poised to redefine network capabilities, extending the forecast for deployment until 2030.

In the U.S., T-Mobile has achieved 4.3 Gbps download speeds on a 5G SA network, collaborating with Ericsson and Qualcomm. Verizon and AT&T are also making strides in 5G SA deployment, with Verizon moving commercial traffic to its converged 5G core in early 2024 to facilitate network slicing and improve efficiencies. In Canada, Telus and Rogers are advancing their 5G SA networks, with Rogers conducting successful 5G network slicing tests in major cities.

The Power of Network APIs

Network APIs are emerging as a critical tool for unlocking 5G monetization opportunities. By exposing network functions through standardized APIs, operators can assist developers in creating innovative applications for consumers, enterprises, and industrial sectors. To achieve this at scale, partnerships between operators and channel partners are vital.

North American operators are exploring various routes to market, collaborating with hyperscalers, CPaaS suppliers, and network infrastructure vendors to bring their APIs to developers. Over time, these partnerships will evolve, with deeper engagement between operators, channel partners, and developers to accelerate the creation of new services. Successful API exposure will be measured by usage rates and how effectively operators monetize these capabilities.

Nokia's recent acquisition of Rapid, a former unicorn, highlights the growing focus on API-driven 5G monetization. Beyond external developer collaboration, operators also aim to leverage APIs internally, empowering their teams to innovate and create new services using network capabilities.

Additionally, a global consortium of telecom giants, including Verizon,



T-Mobile, Deutsche Telekom, and others, is working together to integrate network APIs globally, ensuring that new applications are compatible with any network and can be deployed quickly.

As this ecosystem matures, network APIs will become a central pillar in the telecom industry's shift towards value-driven services, opening new avenues for both internal innovation and external collaboration.

Overcoming Monetization Challenges in Telecom's 5G Era

As telecom operators evolve from traditional service providers to technology-driven companies, the rollout of 5G presents significant opportunities to introduce advanced services, such as AI, cloud solutions, automation, and content delivery.

To thrive in this new landscape, telecom companies must adopt innovative business models that can fully

capitalize on the growing enterprise market. Moreover, the successful monetization of 5G will not be limited to network deployment alone.

Operators will need to build new capabilities to fully harness the

power of emerging technologies. The ability to develop these new assets and effectively manage them will be critical to unlocking new revenue streams and staying competitive in an increasingly digital world. **TR**





Arelion Expands Gulf Coast Connectivity to Enhance East-West Traffic Flow

Set to go live in Q1 2025, Arelion has deployed a new, fully diverse route from Houston, Texas, to Jacksonville, Florida, via Slidell, Louisiana, Mobile, Alabama and Tallahassee, Florida. This direct route provides wholesale and enterprise customers with low-latency IP services and terabit-scale capacities to support AI/ML applications and East-West traffic flows.

The route runs from Arelion's PoP in Houston, TX (Switch – Houston 2), then connects to Slidell, LA (EdgeConnex – SLI01) and Mobile, AL (Uniti Fiber), continuing to Tallahassee, FL (EdgeConnex – TAL01) and onward to multiple PoPs in Jacksonville, FL including subsea cable landing points.

Through this new route, Arelion connects traffic flows from East Coast landing stations to its PoPs in Texas and Mexico, driving growth in booming data center and technology markets along the Gulf Coast.

From Florida to Texas and Mexico

This network expansion introduces a fourth diverse path into Tallahassee to complement Arelion's existing Florida network and provides a new Tier 1 internet carrier choice for edge markets in the region. Arelion's route connects traffic flows from Mexico to hyperscale AI/ML hubs in Texas and provides additional diversity into Atlanta's thriving data center market. The expansion serves mounting customer demand for fully diverse connectivity from Florida to Texas and Mexico as these regions see significant investments to support emerging AI/ML and cloud applications.

Texas: Second-Largest Data Center Market in the US

Texas ranks as the second-largest data center market in the United States, with experts projecting the Dallas market will reach a compound annual growth rate (CAGR) of 12.7% by 2030. Additionally, Arelion already has a robust network presence in Mexico [replace 'robust' with 'powerful']catering to the country's flourishing technology sectors, with experts projecting investment in Mexico's data center market will reach USD 3.5 billion by 2025.

"This route spurs further growth in data center markets along the Gulf Coast through reliable connectivity



that supports data transfer and replication for AI/ML models," said Art Kazmierczak, Director Strategic Sales & Network Development at Arelion.

"Our latest network expansion strengthens local technology ecosystems in these regions while adding diversity to traffic flows landing in Florida from Latin America and the Caribbean, empowering our customers with enhanced resiliency and performance amid growing technology investments."

Network Expansion Benefits

Arelion's route leverages the latest-generation open optical line systems and scalable 400G coherent pluggable optics to support customers' terabit-scale capacity requirements.

With this network expansion, Arelion provides customers in North America with enhanced access to Arelion's #1 ranked global internet backbone, as well as Arelion's portfolio of reliable, fully diverse connectivity services, including scalable IP Transit, Wavelengths, Dedicated Internet Access (DIA), Cloud Connect, Global 40G Ethernet Virtual Circuit (VC) and DDoS Mitigation services for service providers, content providers and enterprises. **TR**



Through this new route, Arelion connects traffic flows from East Coast landing stations to its PoPs in Texas and Mexico, driving growth in booming data center and technology markets along the Gulf Coast





AT&T Plans Copper Retirement By 2029

Ahead of its 2024 Analyst & Investor Day presentation, AT&T Inc. unveiled a bold, multi-year strategic plan highlighted by continued profitable 5G and fiber subscriber growth. This growth is expected to fuel enhanced shareholder returns on network investments through a robust and balanced capital allocation program.



Over the last four years, we've achieved durable and profitable subscriber growth, generated attractive returns on network investment, and strengthened our balance sheet," said John Stankey, AT&T CEO. "We're

putting customers first to become the best connectivity provider in America. Our plan expands the country's largest fiber network to more than 50 million total locations, modernizes our wireless network and rewards our shareholders. As we grow, we expect to return more than \$40 billion to shareholders over the next three years through dividends and share repurchases. With this bold strategy, we are entering a new era of sustained growth at AT&T."

Momentum to Continue with Investment-Led Strategy and Customer-Centric Approach

AT&T is making progress on its journey to become the best connectivity provider in America. Over the past four-plus years, the Company has streamlined its operations and centered its business around the customer as it enhanced and simplified their experiences with AT&T. The Company has also greatly expanded its 5G and fiber services to more people and places and is the largest capital investor in U.S. connectivity infrastructure since 2019.

The Company will unlock new capabilities that further its momentum while investing in future growth – ultimately enabling more robust shareholder returns. As a result of continued investment, the Company expects to be in a differentiated position within the connectivity industry by the end of the decade.

AT&T plans to essentially retire its copper network by 2029. The AT&T copper retirement plan dovetails with the company's plan to make fiber broadband available to 50 million locations by the same year, including 45 million that are within the company's traditional local service footprint.

"Legacy copper services are no longer meeting our customers' needs for speed, reliability and always-on connectivity,"

the spokesperson said. "The Copper network is incredibly inefficient: We are seeing declining reliability with storms and increased copper theft. Copper simply does not do well with water and flooding."

Landline phones work by sending your voice as sound waves into a metal disk, which then turns those waves into electrical energy, a handout from the Virginia Cooperative Extension explains. The energy then travels via a wire, like copper lines, before being converted back into sound waves for the receiving phone.

The plan is to move customers from copper-based voice and DSL services to services based on fiber broadband and the company's fixed wireless service, explained Susan Johnson, AT&T executive vice president and general manager for Wireline Transformation and Supply Chain, at the meeting.

AT&T spends \$6 billion annually to maintain its copper network, which spans the company's 500,000-square mile local service footprint, Johnson noted. Yet only 5% of customers are still using copper voice technology.

"Copper is an energy hog" and is labor-intensive to repair, Johnson said.

In an apparent reference to DSL services, she also noted that "Our legacy services are no longer meeting our customer needs for speed, reliability or always-on connectivity."

The company's fixed wireless service, known as Internet Air, offers speeds that are as much as 25 times faster than DSL, Johnson said.

Johnson touted a new offering – known as AT&T Phone-Advanced – that enables customers to move to a fiber connection or to Internet Air service while continuing to use existing landline devices including phones, fax machines, alarm systems and others.

AT&T Phone-Advanced was well received by customers who have used it and has completed successful testing with the Federal Communications Commission (FCC), said Johnson.

A Two-Phase Plan

AT&T's copper "exit strategy" will be "geographically focused on the wire center level," Johnson said. AT&T has 4,600 wire centers, each of which includes a central office as well as the outside plant served from that central office, she explained.

AT&T is planning to retire copper in two phases.

The first phase will target customers in areas where the company does not plan to deploy fiber because "there is not an economical path to do that," Johnson explained.

Those areas comprise about half of AT&T's landline footprint. But only about 10% of the company's customer base lives in those areas and the company has only four remaining copper customers per square mile in those areas, Johnson noted.

The goal is to have "no customers using copper in these wire center areas by 2027," said Johnson.

The company plans to serve those customers using fixed wireless, and, in some cases, satellite. Johnson didn't offer details on the satellite service. But an AT&T spokesperson confirmed that AT&T Phone-Advanced works with satellite service.

Asked if AT&T will leverage its relationship with satellite provider AST SpaceMobile to support that capability, the spokesperson said, "Our long-term satellite solution is AST SpaceMobile and we will assess other options as they're needed."

Phase 2 of AT&T's copper retirement plans will focus on areas where the company plans to have fiber by 2029. Many landline voice and DSL customers in those areas will be served via a fiber connection. Johnson added, though, that some customers in those areas will need to be served via fixed wireless.

The vast majority of AT&T customers are encompassed by Phase 1 and Phase 2 of the copper retirement plans. **TR**



Sparkle Extends Its American Backbone with MANTA

Sparkle, a leading global operator in the submarine cable industry with a strong presence in the Americas, has partnered with Liberty Networks and Gold Data on the construction and commercialization of MANTA, the new pan-regional subsea cable system.

MANTA will be the first international submarine cable in the Gulf of Mexico, connecting Mexico and the USA with Central and Latin America. The system is estimated to be 5,600km long and designed to support a minimum of 20Tb per fiber pair. With new landing access points in Veracruz, Mexico, and Apalachee, Florida, the MANTA system aims to improve traffic flow in the region by providing new low-latency routes to interconnect major data hubs in Mexico City, Queretaro, Bogota, and Panama City with the USA. The new subsea cable system is expected to be operational by 2027.

As part of the partnership, Sparkle, Italy's first international service provider and a leading global operator, will join Liberty Networks and Gold Data on the northern portion of MANTA, connecting the USA to Mexico, and will join Liberty Networks on the southern portion, accessing Panama and Colombia.

"We are thrilled to collaborate with Liberty Networks and Gold Data on this groundbreaking project," says Enrico Bagnasco, CEO of Sparkle. "MANTA will establish the foundation for future innovations that drive digital acceleration throughout the region. Together, we are committed to building a new pan-regional subsea cable system that meets the growing demands of businesses and customers across the region."

According to Mauricio Traverso, VP Region Americas of Sparkle: "With

Manta, we further expand and enhance the redundancy of Sparkle's American backbone, which features five diversified routes between North and Central-South America, including three new generation undersea 'digital highways:' Monet and Seabras-1 in the Atlantic and Curie in the Pacific. This investment reinforces Sparkle's commitment in the Mexican market, contributing to the development of the country's digital infrastructure and expanding our direct presence."

The new connection provides greater redundancy and reduced latency, bringing content closer to the consistently growing Mexican market. Additionally, the new cable serves as a replacement for aging infrastructure, specifically cables nearing the end of their operational lifespan, which currently connect Panama and Colombia to the United States. With high capacity and advanced technology, MANTA ensures an efficient and future-proof solution for digital connectivity in the region.

Until now, Sparkle has primarily served its Mexican clients through cross-border connections with the United States. With this initiative, the company takes a significant step forward in supporting Mexico's digital transformation and strengthening its role as a key player in the region.


The new cable will land in Panama Digital Gateway, a neutral data center and Cable Landing Station (CLS) born in collaboration between Sparkle and Trans Ocean

Network (TON), a Panamanian telecommunications company.

Integrated with Sparkle's global infrastructure—which includes more than 600,000 km of fiber optic cable from Europe to Africa, the Americas and Asia—and the arrival point for Google's Curie cable connecting California to Chile, Panama Digital Gateway aims to become a key landing point for new submarine cables seeking diversified access to Central America, thus becoming the digital hub for of Central America, the Andean Region and the Caribbean.

With a 25-year history of experience and presence in the region, Sparkle owns and operates a state-of-the-art proprietary fiber optic backbone which counts 59 Points of Presence in the Americas—across U.S., Argentina, Chile, Colombia, Panama, Peru and Venezuela— a capillary presence in Brazil and an open landing and connectivity hub in Panama.

Sparkle sees increasing demand for bandwidth in the Americas as more people seek to communicate both within the region and with the rest of the world. Globally, the North-South America corridor has the highest volume of traffic, approximately 100 Tbps of Internet bandwidth, and is set to grow at double-digit rates in the coming years.

All this activity means the region has a lot of potential for carriers, service providers, OTTs and enterprises to develop revenue growth and drive even greater opportunities for the region. Sparkle is at the heart of this growth. 



América Móvil Explores Agreement with SpaceX for Backhaul Connections

América Móvil is exploring an agreement with SpaceX to enhance its backhaul connections using the Starlink satellite constellation. This move aims to strengthen the company's infrastructure and expand its coverage, particularly in rural areas where connectivity is a challenge.

During the presentation of third-quarter 2024 results, Carlos García Moreno, CFO of América Móvil, revealed that the company is considering partnering with SpaceX to connect its backhaul network to the Starlink satellite constellation. This initiative is part of América Móvil's efforts to improve service quality and reduce costs, ensuring a better experience for its users.

The collaboration with SpaceX would allow América Móvil to leverage Starlink's satellite internet technology

to connect its data centers and base stations in areas where terrestrial infrastructure is limited or non-existent. This is particularly relevant in rural and remote regions where building fiber optic networks is costly and complex.

América Móvil already has a reseller agreement with SpaceX and has been using the Starlink service in Chile for its backhaul network. Expanding this collaboration to other countries could significantly improve coverage and service quality, benefiting millions of users in Latin America.

While the collaboration with SpaceX offers many advantages, there are

also challenges to consider. The capacity of Starlink to handle a large number of simultaneous connections and the need for a sufficiently large satellite constellation to provide continuous coverage are aspects that América Móvil and SpaceX must address to ensure the success of this initiative.

América Móvil's exploration of an agreement with SpaceX represents a significant step toward improving telecommunications infrastructure in Latin America. This collaboration will not only benefit users in rural areas but also strengthen América Móvil's position in the global telecommunications market. **TR**

Why 5G and Cellular IoT Are the Keys to the Next Industrial Revolution



The wireless telecommunications industry has undergone significant expansion, driven by the continued growth of the Internet of Things (IoT) ecosystem.

According to data from 5G Americas and Omdia, global IoT subscriptions have reached 3.4 billion, alongside 6.7 billion smartphone subscriptions. As IoT devices transition from 4G LTE to more versatile 5G technologies—such as 5G RedCap—network operators are benefiting from enhanced energy efficiency and improved network performance.

Hence, projections suggest that by 2029, IoT subscriptions will reach 5.2 billion, while smartphone subscriptions are set to hit 8.2 billion. As mobile operators' IoT revenue growth outpaces other tech sectors, the industry remains poised for tremendous opportunity, with cellular IoT set to drive secure, scalable connectivity across increasingly digital industries.

The Rise of Cellular IoT

As more 5G networks are being deployed, the recognition that 5G serves more than just smartphones is becoming evident. In fact, 5G has proven to be increasingly valuable for enterprises seeking powerful connectivity for IoT applications.

From agriculture to healthcare and manufacturing, cellular IoT solutions powered by 5G are enabling new levels of connectivity, offering more than simple data transfer. With 5G and private networks, enterprises gain access to a wide range of IoT capabilities such as sensors, cameras, and other data-driven devices that improve productivity, security, and operational efficiency.

Global IoT subscriptions have reached an impressive 3.4 billion, and the demand for cellular IoT is rising. An industry report unveiled that five network operators – China Mobile,

China Telecom, China Unicom, Vodafone, and AT&T – managed 83% of all global cellular IoT connections in 2023.

In line with this, Telit Cinterion's ME310M1-W1 Low Power Wide Area (LPWA) module received approval for use on the AT&T LTE-M network this year.

"Whether it is precision agriculture, asset trackers or smart meters, many IoT applications have business models that require zero touch after installation. The ME310M1 meets that requirement and does so while minimizing power usage," said Cameron Coursey, Vice President, AT&T Connected Solutions.

5G is quickly becoming the dominant cellular standard for IoT applications, with more than 300 commercial 5G networks operating globally. The deployment of 5G networks has

surpassed the pace of 4G LTE adoption, marking a tipping point where enterprises recognize the business benefits of high-performance, low-latency cellular connectivity.

As cellular technology advances, IoT applications are moving from Local Area Networks (LAN) to Wide Area Networks (WAN), creating a strong demand for lower latency and enhanced connectivity that are not only for expanding access but refining connectivity for a wider variety of enterprise applications. Many of these applications are resource-intensive, such as real-time data monitoring, security, and automated industrial systems.

The Benefits of Cellular IoT for Enterprises

Cellular IoT offers substantial advantages over traditional connectivity options like Wi-Fi, particularly for enterprises operating across wide or geographically diverse areas. Here's how cellular IoT meets the needs of enterprises:

1. **Wide-Area Coverage:** Unlike Wi-Fi, cellular networks can cover vast areas, making them ideal for industries like agriculture, where devices need connectivity across large, remote fields.
2. **Mobility and Scalability:** Cellular IoT offers seamless connectivity across borders and diverse environments, whether devices are stationary or in motion. This is crucial for tracking logistics in supply chain management, where goods and assets need to stay connected.
3. **Enhanced Security:** Cellular IoT provides encrypted, carrier-managed infrastructure that meets the security standards of even the most sensitive industries, including healthcare and critical infrastructure.
4. **Low Latency and High Throughput:** 5G's low-latency capabilities allow enterprises to deploy applications requiring real-time data, such as medical equipment, manufacturing robots, and surveillance cameras.

The shift to cellular networks is heavily reflected in enterprise adoption trends.

According to a report by Vecna Robotics, 5G ranks high on the list of priority technologies for enterprises, with 41% of surveyed supply chain professionals planning to implement 5G to connect IoT devices such as autonomous mobile robots, security cameras, and tablets.

Given this, cellular IoT solutions ensure continuous operation even in challenging environments where traditional connectivity options like Wi-Fi may fall short.

Launched in 2022, Sparkle IoT Global is a managed IoT connectivity service allowing companies to control their assets across multiple countries and with a seamless user experience, particularly suitable for applications requiring real-time control.

5G RedCap

Introduced in 2024, 5G RedCap is poised to transform the IoT ecosystem, making advanced 5G features more accessible across mid-speed applications such as wearables and smart cameras. Its streamlined design, including optimized channel bandwidth and capped modulation, allows for greater efficiency and extended battery life.

Having said that, 5G and 5G RedCap are set to propel the global cellular IoT market's projected 18% compound annual growth rate (CAGR) between 2024 and 2030. Offering flexibility and cost-effectiveness, 5G RedCap is gaining traction for IoT devices that don't require the ultra-low latency needed for time-sensitive applications.

RedCap modules deliver download speeds up to 150 Mbps, upload speeds of 50 Mbps, and latency under 100 ms. These specifications are sufficient for a range of consumer, enterprise, and industrial devices while reducing device complexity and cost.

As a result, this has led to a surge in IoT applications using 5G RedCap, especially in video surveillance, where the module's uplink capacity supports high-quality video transmission without the expense of full 5G capabilities.

Industry Outlook

Ultimately, IoT's integration into cellular

technology supports technological advancements as well as economic growth, as it bridges the gap between digital connectivity and critical applications across diverse industries.

Moving forward, IoT's integration with cellular networks will drive new revenue streams and foster the expansion of private 5G networks for operators, particularly in sectors like manufacturing and supply chains.

Frost & Sullivan also highlight that leaders in telecom are focusing on strategic partnerships and adopting emerging cellular IoT technologies like Narrowband IoT (NB-IoT) to address a range of industrial needs and meet the demands of smart cities, fleet management, and remote monitoring. These partnerships and technologies are critical to supporting advanced IoT capabilities across various industries, with the ultimate goal of creating more resilient, flexible, and scalable IoT ecosystems. 



From agriculture to healthcare and manufacturing, cellular IoT solutions powered by 5G are enabling new levels of connectivity, offering more than simple data transfer





Costa Rica Advances in 5G Technology Deployment

Cinthya Arias Leitón, President of the Telecommunications Superintendency Council of Costa Rica (Sutel), spoke with Telecom Review Americas about the advancements, challenges, and opportunities the country faces in bringing connectivity and new technologies like 5G to all citizens.

How is the 5G deployment process going in Costa Rica? In Costa Rica, it has been a long process.

Remember that there are two extremely important elements that enable 5G: the first pertains to the radio spectrum, which is currently under a bidding process, and second, regarding the requirement in terms of network capillarity; it is also necessary to deploy infrastructure in Costa Rica.

We have faced difficulties, as in many other countries, in developing infrastructure swiftly. Therefore, it was established as one of the objectives within public policy and the bidding document that it would be a non-revenue process.

Additionally, a fundamental element is that part of the price set would be covered by infrastructure development, which serves as an incentive for operators to enter the market or process.

What is the strategy for reaching remote areas?

The National Telecommunications Development Plan establishes priority districts. These priority districts are decided according to several elements.

One is the level of coverage that the current market has provided. Another is the level of coverage that the region could have added through interventions from the National Telecommunications Fund (Fonatel), also managed by the regulator.

The level of development and the existence of vulnerable populations, whether due to geographic vulnerability, distance that severely limits access to telecommunications technologies, or the presence of poor populations or those with low purchasing power, making it difficult to acquire services, are considered.

All these elements are ranked, so to speak, from greatest to least need.

Accordingly, based on the spectrum bands in which the operator or potential 5G concessionaire will participate, it is necessary to establish a series of conditions that apply to the priority districts to maintain the concession over time.

For the operator, it makes much more sense to develop infrastructure in all those main districts. If, according to their bid in the auction, they meet all conditions and want to continue developing others as an operator, there is another list of districts. It is also important to consider that in some cases, these districts are prioritized to close the digital divide, while in other cases it is to deepen the market, meaning the market has already reached there, but more services are needed.

When will the bidding conclude, and who will deploy the networks?


At this moment, as it is a bidding process, everything is expressed according to the Public Procurement Law. New resources have been submitted to the Attorney General of the Republic, who resolves these issues. We expect to have a resolution by mid-December.

The conclusion of the first stage of the process is the definition of eligible operators, which we hoped to have without these new resources by mid-December. Eligible operators will be announced, and then a date for the auction will be set. So, we could say that by the first or second quarter, the whole process might be complete. However, it will depend on the pace of these legal processes and adherence to the Public Procurement Law.

What do you think is Costa Rica's main challenge in terms of connectivity?

In terms of connectivity, closing the significant gap is essential. Currently, we have fairly broad coverage levels, but what is really necessary for 5G or any technology to be developed effectively is to generate the necessary digital skills and promote productive use. Thus, much work is

done by the regulator in conjunction with other authorities because it is not a solution from a single entity, but an ecosystem solution, and we are open to working with the industry.

We have always worked closely with the industry, either seeking solutions or supporting them in evangelizing the process within our competencies. Internet penetration in Costa Rica is high, especially mobile internet penetration, which exceeds 150% in mobile data. It may be close to 92% for fixed internet. However, there has been a substitution effect, much driven by the pandemic. We have universal service programs supporting both supply and demand. 



*We have faced difficulties,
as in many other countries,
in developing
infrastructure swiftly*





MEF Reports Significant Momentum in LSO API Adoption and Innovation

MEF has seen unprecedented momentum in its Lifecycle Service Orchestration (LSO) API adoption and innovation, with more than 160 global service providers from 65 countries involved in the adoption lifecycle. This momentum is underscored by MEF's transformative initiatives, including an enhanced enterprise API portfolio, the innovative LSO Payload Factory program and new smart contracts work. These initiatives, coupled with new certification programs and LSO partner-finding tools, mark major progress in MEF's mission to accelerate NaaS automation and digital transformation across the global NaaS ecosystem.



The rapid adoption of MEF's LSO APIs across our global ecosystem reflects an ongoing shift towards automated, standardized service delivery," said Daniel Bar Lev, Chief Product Officer, MEF. "With

expanded capabilities for enterprises, the LSO Payload Factory program, and blockchain-driven smart contracts, we're enabling a new standard of efficiency and flexibility in Network-as-a-Service. MEF's commitment to collaboration and innovation ensures that every stakeholder in our ecosystem—from service providers to enterprises—can leverage open standards to deliver seamless, automated experiences."

Key Progress / LSO Developments

Enterprise API Innovation

Over the past year, MEF has expanded its APIs for business to also serve enterprises, enhancing the LSO offering and driving broader industry adoption. A key example is MEF's Circuit Impairment & Maintenance (CIM) Service API, which bridges the gap between networks and applications, supporting the growing focus on network APIs. Demonstrated at GNE 2024 by AT&T, Bloomberg, Prodapt, UMPC, Verizon, and Williams-Sonoma, the CIM Service API exemplifies how real-time notifications can improve network management for enterprises. Through these open-standard APIs, enterprises gain access to NaaS capabilities, such as automated ecosystems, multi-domain connectivity, and enhanced management and visibility.

Industry Standardization & Collaboration

Its commitment to industry-wide API standardization has yielded significant

results through MEF's strategic industry collaborations with TM Forum and others. The coordinated approach enables each standards organization to focus on their core strengths while ensuring seamless integration across the ecosystem. For example, MEF LSO APIs provide business and operational automation between parties in an ecosystem while TM Forum Open API standards provide automation within each ecosystem partner's systems.

LSO Payload Factory Program

The new LSO Payload Factory program accelerates the standardization of machine-readable product descriptions for use in NaaS offerings. This innovative approach enables rapid development of pre-standard product payloads through member collaboration, which can be standardized in a later phase, addressing the market's need for faster introduction of connectivity, cybersecurity, clouds, and resource products.

Blockchain Integration

MEF is pioneering the integration of blockchain technology and smart contracts in automated NaaS ecosystems to eliminate business friction between buyers and sellers. Through its adoption of a groundbreaking 'mutual endorsement in real-time' approach, MEF has become the first telecom industry consortium to standardize blockchain usage for business between ecosystem partners. This innovation was demonstrated in a NaaS Accelerator project, where members successfully developed and piloted automated SLA reporting—creating the industry's first smart contract-based solution that ensures immediate agreement between parties and dramatically reduces service delivery disputes.

Future Roadmap and Initiatives

Product Payload Evolution

MEF's LSO product payload roadmap continues to expand with significant additions planned for Q4 2024, including standardized descriptions for wavelength services, cloud connectivity, cross-connects, Internet access, edge compute, and CAMARA Quality on Demand. This growing portfolio of standardized payloads, developed through the LSO Payload Factory program, will enable service providers to rapidly integrate new services into their NaaS offerings throughout 2025, accelerating time-to-market for innovative network services.

LSO API Certification Program

A new phase of MEF's LSO API Certification Program will launch in Q4 2024, combining development-stage IT testing with market-ready certification validation. The updated certification framework provides definitive proof of LSO API interoperability readiness for service providers and enterprises. As API-driven automation becomes increasingly critical for business operations, MEF's certification program ensures participants can confidently engage in standardized, interoperable API implementations across the NaaS ecosystem.

LSO Partner Identification Tools

A comprehensive interoperable partner identification platform will launch in Q4 2024 that will dramatically speed up the connection of LSO API implementers with potential partners. This dynamic platform will provide real-time visibility into the LSO API capabilities of participants, enabling companies to quickly identify and engage with compatible partners. **TR**



Gina Perini, CEO of Somos, Inc.

Somos's Gina Perini Reflects on Women in ICT and the Power of Authentic Leadership

Inspired by innovation and driven by the desire for comprehensive inclusion, Gina Perini, CEO of Somos, Inc., is advocating for diversity and collaboration across the ICT industry.

In an exclusive interview with Telecom Review during the 18th edition of the Telecom Review Leaders' Summit, Perini emphasized the importance of welcoming more women into leadership roles, an ambition that aligns seamlessly with Somos's guiding principle, 'Go Further Together.' She further shared her opinion on the progress that has been made over the past year, the transformative power of female leadership, and the collaborative strategies essential for overcoming the industry's evolving challenges.

You were a speaker on the 'Women in ICT' panel at the 18th Telecom Review Leaders' Summit, where you mentioned that you "want to see more women welcomed at the table." Now a year later, do you think the industry has progressed in this domain?

It's definitely been a year of progress. I think, like anything, this is about systematic change that takes a long time. You have to put the wheels in motion. You have to really think about what you want the change to look like and how you will facilitate that change. In the last year, we've seen progress but we need to look ahead with a long-term 'North Star' mindset to increase the representation of women and other underrepresented people in leadership roles. These are the roles where we really need the best and brightest to enable innovation as the world is changing fast.

For me, it's important to identify how we can bring this great talent into our boardrooms and to events like this so that we can really meet a future that consistently requires creativity and innovation.

How does Somos's "Go Further Together" initiative aim to shape the future of telecom, and what collaborative strategies do you believe are key to driving innovation and overcoming the challenges facing the industry today?

Thank you for that question because

it addresses how, as a company, Somos identifies how we can work together internally and with our external partners and customers to 'go further together'; It's always about collaboration. We always look at how we can converge our ideas to solve problems.

Internally, we address this by identifying how we can work together and leverage our strengths to solve our customers' and stakeholders' problems.

From an external perspective, it's why this event is so important as well; it's bringing together different folks across the industry, whether it's people who are at the governmental level, people who are working as service providers, or people who are part of industry groups trying to solve big issues not only in telecom (now that there's so much technological innovation) but in the broader landscape.

'Going further together' encompasses how we can take all that collective intelligence and make the future so much brighter.

Your advisory and executive board currently comprises 10 women, including yourself. Taking this into account, can you elaborate on the impact that female leaders, particularly those in executive roles, have on driving business transformation?

I like to surround myself with the best and brightest to achieve our customers' and stakeholders' goals; thus, those numbers make complete sense to me because you want to be surrounded by the people who are thinking 'outside of the box' as we try to figure out how to adapt in a fast-changing world.

When I think about my leadership team and the people in my organization, I always try to recruit the best talent, and as we all know, you have to find those people. They're out there in the world and they're not always in the places we expect them to be or in the same groups that

we're in. We need to actively seek out women and underrepresented people in our environment to attract them to the telecom industry because there's so much happening in the telecom space. We want to make sure that we're exciting those people and inspiring them to be a part of the change we want to see—which is more innovation and more adaptability.

We have multiple technologies and we need to figure out how to leverage them to create a more trusted telecommunications industry, bring more exciting innovations, and offer better experiences to our customers and those that rely on communications in their everyday personal and professional lives.

Attracting people to the telecom pipeline will only make us stronger, more innovative, and will equip us with the ability to meet future needs and serve consumers across the world.

Do you think women in leadership positions have adopted more traditionally masculine traits, personas, and leadership styles to bridge the gender gap on boards?

I think anyone who wants to be a leader needs to be who they are. They need to be authentically themselves to truly lead because if you take on traditionally masculine roles, or any other type of gender-stereotypical role, you won't really be you.

Leadership is about meeting people as they are, making connections, and helping them understand your vision. If you are presenting a persona that's not you, then it's really hard for you to make those connections and people won't truly understand your goals.

I love to see different types of leaders in action and learn from them so that I can see how I too can adopt different strategies as a leader. I think it's always better to be who you are and build from there. As the world embraces this, I think we will see really exciting developments in the future of leadership. **TR**



Maria Stebneva, Head of Sales for Canada at Juniper Networks

Juniper Networks's Recipe for Elevating User Experiences with Innovative Solutions

In an exclusive interview with Telecom Review during the 18th edition of the Telecom Review Leaders' Summit, Maria Stebneva, Head of Sales for Canada at Juniper Networks, highlighted how the company is leveraging artificial intelligence (AI) to deliver the latest cutting-edge solutions and elevate user experiences.

How does Juniper Networks leverage artificial intelligence to deliver innovative solutions to service providers?

In Q1 2024, Juniper announced the first AI-Native Networking platform, along with its strategy to be the leader in AI-Native Networking. With a mission to deliver exceptional customer experiences, our priority is to ensure that every connection counts.

Our AI-Native Networking vision for service providers builds on our experience-first networking approach, which provides a better-connected experience by simplifying network operations for service providers, so they can focus on delivering a better customer experience to their end-users. We believe the first step in achieving these results is making sure we collect the right real-time data; transform it to provide the most predictable, measurable results; and ensure that the end-to-end services are working seamlessly.

At the core of this AI-native networking platform is MIST, the company we have acquired, which uses AI, including machine learning (ML), and data science to collect data from access points, switches, routers, and firewalls, and helps with the resolution and optimization of the user experience across wireless and wired access, SD-WAN, data centers, and security domains. As an example, our ML capabilities provide predictive analytics that help accelerate MTTI and MTTR for network and service-related issues,

even, at times, before the customer notices.

What are your company's latest cutting-edge solutions that aim to enhance operator and user experience?

Juniper is perhaps best known for building networks that can scale to meet the needs of the smallest regional and largest, global service providers around the world. Our reputation in this field is built on a foundation of technical expertise, innovative design, and a deep understanding of the challenges faced by large-scale network operators from the access and metro to the multi-service edge, across the core, and throughout the data center.


One remarkable solution we recently announced is the PTX10002-36QDD. It's an exceptional piece of equipment that provides a throughput of around 28.8 TB with 36x 800GigE, 72x 400GigE or 288x 100GigE interfaces. Last week, we enabled the first in the world deployment in Finland with telecom operator, Elisa, delivering 800 GBPs ethernet services over 800 GBPs Juniper coherent optics, demonstrating a worldwide breakthrough.

How important are strategic collaborations in achieving Juniper Networks's goals and vision for the digital future?

We are very open to meaningful collaborations. Right now we look at the AI data centers' ecosystem and the players in the AI data center space.

Another example is Juniper Beyond Labs is an innovation hub within Juniper Networks that focuses

on delivering experience-first networking through an AI-Native Networking approach.

Our global research and engineering teams work with an ecosystem of partners to pioneer technology focused on solving our industry's most difficult challenges. 



Juniper is perhaps best known for building networks that can scale to meet the needs of the smallest regional and largest, global service providers around the world





Latin America Faces 19% Higher Losses in Intangible Assets than Tangible Ones Due to AI and Intellectual Property Misappropriation

The average maximum probable loss for intangible assets, such as information assets and intellectual property, was 19% higher, at \$1.03 billion, compared to tangible assets like property, plant, and equipment, which registered losses of \$867 million, according to the report *Comparative Risk Report 2024: Reducing AI, IP, and Cyber Risk by AON*.

The report, based on responses from 528 companies across Latin America, emphasizes the risks associated with Generative Artificial Intelligence (GenAI).

Generative AI, which creates materials such as images, music, and text, brings about significant risks, including security and privacy breaches, and intellectual property infringement, one of the major sources of value creation in the corporate world. Cyber incidents are also identified as major sources of intangible asset losses for organizations.

The report particularly highlights the role that insurance can play in protecting intangible assets, helping

companies in better allocating resources and protecting against tangible and intangible threats.

"Companies must be aware of the opportunities presented by technological evolution, without losing sight of the threat perspective. Currently, cyberattacks and data breaches are the second largest business risk in Mexico. Organizations need to proactively protect themselves through insurance policies, continuous diagnostics, protocols, and ongoing training for employees," commented Maria Fernanda González, Head of Financial Lines for Mexico at Aon.

The study reveals that the average total investment value in tangible assets is \$1.087 billion, while the value of intangible assets is \$1.223 billion. However, only 19% of intangible assets are covered by

insurance, compared to nearly three times more tangible assets, at 57%.

"In its most basic form, insurance is a financial instrument—a way to manage the cost of future risk. Our research shows that intangible assets are valuable because they generate competitive advantages, are pillars of digital transformation, and are subject to significant cyberattacks. The challenge is to offer our clients innovative solutions that address their main priorities and provide all our global expertise. It's no longer enough to have cyber insurance or insurance that protects intellectual property; with the proliferation of intangible risks, we are expanding the scope of insurability and will continue to be there with our clients, advising them to make the best decisions," stated Edwin Sabogal Rojas, Cyber Manager for Latin America at Aon. [III](#)

Frederick Chui Assumes Full CEO Role for PCCW Global After Serving as Co-CEO Since 2023



Frederick Chui has been appointed as the new Chief Executive Officer of PCCW Global, taking on the role to drive the company's integrated global communication solutions business.

Before joining HKT, Chui engaged in product and solutions development for several telecoms operators serving the Asia Pacific. He holds a Bachelor of Engineering from the University of Nottingham and an Executive MBA from the Chinese University of Hong Kong. Chui joined HKT in 1991, and held various key positions in solutions

design, product management, product development and marketing.

Moreover, Chui has served as the Senior Vice President of PCCW Global's International Products and Solutions division, overseeing PCCW Global's product management and development activities, as well as marketing and presales support activities around the world.

In 2008, he was appointed Head of Eastern Europe, Mediterranean, the Middle East, Africa, and Oceania Sales

and Business Development Operations. He also served as the Senior Vice President of Global Marketing and Sales, and Senior Vice President of Global Data Sales and Presales, from 2011 to 2018. From 2019 through 2023, he served as the Chief Commercial Officer of PCCW Global, and was appointed Co-CEO in 2023.

In addition, he has demonstrated his industry influence through key board memberships, notably serving on the MEF (Metro Ethernet Forum) board since 2018 and as a board member of the Bridge Alliance since October, 2022. Locally, he served as a member of the Hong Kong Trade Development Council's (HKTDC) Information & Communications Technology (ICT) Services Advisory Committee from 2019 to 2023.

Chui takes over from Marc Halbfinger, who served as CEO of PCCW Global for 14 years. During his tenure with PCCW and Console Connect, which spanned 20 years, Halbfinger catalyzed growth and innovation in global connectivity, solidifying the company's position as a leader in the sector.

Uniti Group Adds New Hyperscaler Fiber Customer



Uniti Group Inc. announced a new 20-year contract award from a

strategic hyperscale customer in Alabama. As part of this award, Uniti

will construct a new long-haul route that will span over 200 route miles when complete, connecting new data centers optimized for Generative AI, and broadening Uniti's reach throughout the state.

In order to deliver on the new contract and create significant capacity for future growth, Uniti will build a multi-duct fiber system with several high-count fiber cables between Montgomery and Mobile, AL.

U.S. Department of Defense Approves Corning® Everon Software-Defined Local Area Network Portfolio for Federal Defense Networks



Corning Incorporated announced the U.S. Department of Defense's approval and certification of its Corning Everon® Software-Defined Local Area Network portfolio (SD-LAN) as an Assured Services Local Area Network (ASLAN) by the Joint Interoperability Test Command. The portfolio has been added to the Department of Defense's Information Network (DoDIN) Approved Products List (APL).

Compatible with other DOD systems, this portfolio enables data-dense applications and streamlined installations, with the capability to evolve as network needs grow. Federal agencies can reduce up to 50% in total cost of ownership compared to a copper-based legacy network, all while achieving a secure and scalable network.

"Current legacy copper infrastructure in most federal facilities simply cannot support future data streams at the speed required for mission

success. The rapidly evolving digital capabilities in United States military systems and equipment cannot be hindered or restricted by the limitations of supporting infrastructure which could take years to upgrade," said Robert Basile, Global Market Development Director, Corning Optical Communications. "Corning's DoDIN APL certification reinforces our commitment to providing solutions for the design and engineering of federal facilities and future networks."

PhireLink Deploys Adtran's Fiber Access Solution to Bridge Louisiana's Digital Divide



Adtran announced that PhireLink has deployed its open and intelligent fiber access technology to bring high-quality broadband to some of Louisiana's most underserved rural communities. The deployment features Adtran's Mosaic

One software-as-a-service and its Intellifi® connected home solution to support a robust end-user experience. Using Adtran's AI-driven platform, PhireLink is rapidly scaling a highly efficient, future-facing network capable of delivering critical public services, such as remote learning and telemedicine, and stimulating economic growth across the region.

"We selected Adtran for its open, scalable technology. Our new solution

helps us bring dependable, high-speed broadband to more rural communities across Louisiana," said Glen F. Post, III, CEO of PhireLink. "Working in close collaboration with Adtran's team, we are not just constructing a network. We're taking a crucial step towards bridging the digital divide, providing the broadband access needed to invigorate local economies and drive sustained improvements in quality of life."

SECOM Deploys Infinera XTM Series for Middle-mile Network



Infinera announced that SECOM is modernizing its middle-mile and business Ethernet access network using Infinera's XTM Series optical transport solution to bring new multi-gigabit broadband services to previously underserved rural southern Colorado communities. SECOM's enhanced network provides connectivity for thousands of customers,

including homes, schools, libraries, government entities, telecoms, and businesses.

SECOM, the wholly owned broadband subsidiary of Southeast Colorado Power Association (SECPA), a rural electric power cooperative, is one of the largest telecommunications service providers in the region, with a fiber network spanning around 2,000 miles throughout southeastern Colorado.

With Infinera's XTM Series, SECOM is expanding the capabilities of its

middle-mile network to deliver multi-gigabit Ethernet services driven by the bandwidth growth of large enterprises and industrial parks, as well as the 100G/400G broadband transport needed to aggregate thousands of broadband services offered in newly created fiberhoods. This middle-mile network modernization project provides SECOM the network flexibility, reliability, and reach needed to maximize the region's economic and social development opportunities and close the digital divide in the most remote and rugged locations.

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PTC
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03-06

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MARCH 2025
12-13

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Irving Convention Center,
Dallas Texas

MARCH 2025
19-20

Americas Wholesale Congress
Miami Florida

MAY 2025
21-23

Big 5G Event
Las Colinas Texas

JUNE 2025
01-04

Fiber Connect 2025
Nashville Tennessee

AUGUST 2025
07-09

Fintech Devcon
Austin Texas

AUGUST 2025
20-21

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Rio de Janeiro

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